Connecting Points

September 2013

"TELL ME AND I FORGET, TEACH ME AND I REMBER. INVOLVE ME AND I LEARN"
BENJAMIN FRANKLIN

INSIDE THIS ISSUE:

Special points of interest:

- CIP Code Changes
- Curriculum Changes
- Courses Added
- Regional Teacher Meetings
- TSA Opportunities
- Safety Training
- KOSSA Changes
- Certifications
- Student Competitions

Making A Connection

As part of sharing information with state Technology Educators while building a working relationship I thought developing a newsletter would reduce the amount of emails while being considerate of your time. Communication is an important part of trying to improve our program area of study. To publish brief articles with links and topics that may be relevant to various programs will hopefully improve the means of sharing relevant information. Over the past year I have been very fortunate to observe the success of many of your programs and wish to share this wealth of knowledge and ideas with instructors throughout the state. It is my hope that the news letter will become part of our communication routine and you will look to it for important information as we move forward in preparing our students to become Career and College Ready!"

2013-14 VEX Competition

The VEX Competition schedule has been setup for this year. Those that may be interested in this particular event should be aware that qualifications for the World Competition has changed. Doug Klein held a meeting Saturday August 24th over the new rules and competitions qualifications. Doug developed a power point that shared a great deal of information that will be helpful in building your robotics, competition strategies, and contact links, which is available for you to review and use for instruction. The attendance and interest from the past years has grown, so registration is important. For further information please contact Douglas.klein@scott.kyschools.usor Michael Martus Regional Support Manager mike_martus@roboticseducation.org. Please see calendar for events to plan. Boyle Co. may be an addition.

Engineering Technology Program Changes

Pathways and CIP Code changes have taken place as a result of implementing seven (7) pathways. With this change two CIP code numbers have been removed and for Non-PLTW programs you will need to submit a CIP Code Request Form Request. The reason is the Engineering 15.0000 and Technology 21.0101 are no longer in TED's. You will review the new Pathways and have the students placed in one of the new pathways by your TED's individual. This will ensure student data that includes information on Preparatory, KOSSA, and Completers will be in place for this year. I have created several documents that give detailed information on all the KY Valid courses Quick Reference List, New Pathways, Chart for Pathways, KOSSA, Certifications & Suggested courses for pathways, course descriptions for the High School and Middle School programs on the KDE web site. An example: If the sequences of courses (Non-PLTW) were preparing a student to be successful more in the Design and Drafting field and I had been using the **15.0000 Engineering** CIP code for those courses/students I would select **14.2901 Engineering & Technology Design** as the pathway.

One should select a minimum of two (2) courses from the Recommended Column. If you notice in some other Elective Courses 060112 Computer & Technology Applications is listed. This means this course may be counted toward the ***Completer*** status even though it may be taught by an IT instructor. Furthermore the new courses that have course numbers starting with **2102..** have similar LEAD Codes as those of PLTW. Administration should review these LEAD codes for qualified instructors in those areas.

As we move forward we will be asking for instructors, administrators, business and industry individuals to work on curriculum taskforce groups.

It is intended to allow students in the courses prior to this year be placed in the selected Pathways even if some courses may not a perfect fit. Multiple pathways at a school are possible, but should not be for the same student with same classes.

KOSSA and Industry Certifications: More Industry Certifications have been added and some pathways may select between two KOSSA exams. Standards are now placed in CIITS for those that are using that technology.

Regional Teachers Meetings

Last year we held meetings in the evening for teachers and other interested individuals at six locations. That was an opportunity for us to formally meet and discuss the new Accountability Model, program of study, CIP Code changes and other concerns. From this summer conference the feedback was to try to hold similar meetings this year. I will make plans for such meetings that I hope you will be able to attend.

There are many topics of concern with the hope to improve our program offerings, teacher qualifications in area, safety, professional development, student and teacher organization, funding, equipment and facility needs, curriculum, standards, and course development, post-secondary relationships and student opportunities, college and career pathway alignment. Monday through Thursday's seem to be the best days to have evening meetings. I would like to hold them at locations that you will not have to travel great distances and can be done after school. I know many may not be able to attend due to other obligations or restrictions. I would your input about having the regional meetings.

Industry Certifications

If you notice on the KOSSA and Industry Certifications 2013-14 document that at least 15 items have been added in our program of study. During the summer conference Certiport held sessions on what their company offers, opportunities, and process for implementing testing sites. You may know of other opportunities for educators to use for industry certifications, if so, then those need to be submitted prior to December for review and approval for the following year. Dr. Mike Crowhurst and his students at Pulaski County high school were very successful utilizing this opportunity last year for the Autodesk certification. Nothing is easy or free anymore and instructors will have to review such certification opportunities to see if they can be implemented into their programs. Having these certifications on the KOSSA list will make them available for use.

KOSSA Testing

There are important changes this year dealing with the KOSSA test. This year's test will be electronic and multiple choice. Districts, teacher and students will receive feedback regarding student performance as it relates to each standard, not the exact question. This will be very helpful for instructors and students targeting areas of improvement toward instruction regarding to standards. The possibility for a student that is preparatory as a junior taking the test would be able to address those concerns their senior year and then retake the test with more confidence.

There scenario test component will comprise of a series of multiple choice test questions that will replace the single written scenario question. I am under the understanding there will be a number of questions pertaining to the scenario topic not just one question. Missing one scenario question would not result in failing the entire exam.

At the present time we still only have one Engineering KOSSA exam, with the plans to develop exams for various new pathways in the future. I have submitted a request for such work and waiting for results to make such plans. When this time comes I hope that if asked you would consider participate in that work. On September 18, 2013 Pam Moore has scheduled a KOSSA analysis for the Engineering exam being used this year. The intent is to review for outdated topics, corrections, and other errors for the most part.

You may notice that in some of the new Pathways there may be more than one KOSSA test listed for that area. Here is where the standards become an important part of your instructional program. In CIITS the standards for all CTE programs are listed and should be reviewed in your curriculum. If your plans are to have the students take the Manufacturing KOSSA exam then the standards should be met in the program area for student's success.

As this year moves forward I will have further information and if you have questions please contact me. CIP codes are an important part of KOSSA for tracking student's pathway/ course selection, lead codes and for qualification for the proper KOSSA test. Many students were not counted due to not meeting the 3 required course credits with the specific pathway and/or incorrect course numbers.

Project Lead the Way

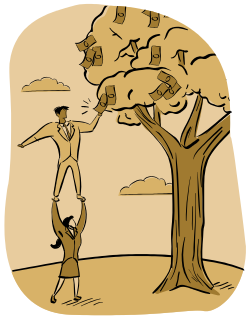
CONFERENCE: The traditional PLTW State Counselor Conference has been changed to another format. The merging of the PLTWKY STEM Innovation Summit, the UK College of Education, KDE, state government and other interested STEM participants has be conducted to replace the PLTW Counselor Conference. This event will be held October 28-29th at the Lexington Convention Center. Please let your administration and Counselor's now of this change. They may be looking for the conference information instead.

Registration Fees are:

October 29th = $100

October 28 & 29 = $175

Further information can be found at PLTWKY website.



FUNDING: Many of you may have heard that funding for some of the RFA (Request for Application) Grants have been reduced for this year. Over $600,000 has been cut from this years opportunities. At the present time we are not sure of the amount that will be available. Sustainability funding shall be a consideration for existing programs as we move forward this year. As part of this and other concerns an effort to survey existing programs throughout the state has been considered to establish the status of all programs and their concerns.

CORE TRAINING: With the addition of new programs in GTT core training has changed over the last year. This can greatly affects the middle school GTT program teachers when they plan for their summer. To get an idea for next year's planning I would suggest reviewing the past summer training schedule to get an idea of the courses you my planning for your school and see how they were grouped.

TSA OPPORTUNITIES: Student organizations are an important part of the CTE program and offers students great opportunities to compete at state and national levels. If you haven't been involved with TSA please take some time to check it out.

SAFETY

With the changes of curriculum, type of equipment and type of activities in our classrooms creating a safe learning environment for students is ultimately the responsibility of the instructors. There are concerns for safety in programs where instructors may not have formal training or work experience with the safe operation of equipment and tools necessary to accomplish all tasks within a specific curriculum. We all should be following standard safety policies to ensure student and staff safety. Safety concerns may also pertain to a certified technology instructor's as well such as for new equipment and/or procedures for programs that have new technology and equipment. Regardless of your background, if you do not feel confident in any machine or tool process seeks help before attempting that activity. There are many basic lab safety rules for students that should be followed regardless of an instructor's background.

According to the Office of Career & Technical Education's Policies and Procedures Manual, all instructors must be familiar with the operation procedures of equipment and tools utilized within the program. All students will be given specific safety instruction at the beginning of their program. Students will be required to show knowledge of safety procedures prior to the operation of school equipment, machines, or tools. Under no circumstances should students operate equipment or tools without the instructor's permission and supervision.

In the event of an accident, a standard report is completed, which describes the nature of the accident and reflects any practices or conditions that may have contributed to the accident. All accidents, regardless of how minor, should be brought to the attention of the instructor.

As part of the safety concerns establishing safety awareness training for instructors coming in to the Career and Technology programs and the up-grade of knowledge and skills for current technology instructors are being examined.

There are new opportunities for schools becoming a NETWORK school with ITEEA. All schools regardless have access to the ITEEA curriculum since Kentucky is an Consortium member. I have sent out an email with the instructions and access information to all teachers from my contact list. If you need this information contact me and I will send and/or add to my list.

ITEEA has an agreement with Autodesk that allows Network Schools to utilize Autodesk CAD software for free along with other educational opportunities. Please visit there website for

Program and Curriculum Support

As an educator sometimes you may get the felling that you're out on a limb when it comes to finding curriculum support, ideas, and current opportunities. Being involved in various competitions, student organizations, school events, advisory meetings, and communications with other teachers can be helpful. Many teachers I have met over the last year have been a great resource that I have shared with others. The newsletter can be another tool in working together. The following information is not a endorsement for any one specific individual but contacts of venders or individuals that have supported various programs or may have material that you may wish to investigate. Those listed participated in KACTE 2013 Conference.

Bluegrass Educational Technologies, *www.bluegrasset.com (Frank Cercone) Educational Training Equipment & Curriculums*

Certiport, *www.certiport.com (Rick Holbrook) Certification and Testing*

Energy Concepts Inc., *www.eci-mail.com (Dan White) Contextual science courses and Engineering/Technology*

Kentucky Engineering Exposure Network, *www.tranportation.ky.gov (Jennifer McCleve) Free program to encourage students to take an interest in engineering*

Legacy Woodworking Machinery, *www.legacycncwoodworking.com (John Hennen) Woodworking machinery for the classroom*

Pitsco Education, *aradell@pitsco.com, www.pitsco.com (Angela Radell), Educational Technology materials, supplies, and curriculums.*

Technical Training Aids, *www.ttaweb.com, Herb Wedig, Software and equipment*

White Box Learning, *www.whiteboxlearning.com, (Graham Baughman), STEM Engineering web-based software/activities.*

TSA: A Valuable Resource for Instruction and Student

Technology Student Association is a great resource for teachers and students and would like for you to take some time and look at the information on the state and national TSA websites.

For those not familiar with TSA I would like to share this brief information: "The TSA is a national, non-profit organization of middle and high school students who have a strong interest in technology. TSA was chartered in 1978 and since then over 2,000,000 students have participated in its program. Members learn through challenging competitions, leadership activities and community service." More can be found at the link. There is a wealth of information that the association provides from student officer newsletters to competitions. Instructors will find that the competitions and curriculum material provided for TSA greatly support the Engineering Technology programs. They give students the opportunities to compete, develop new friendships while learning lifelong skills.

Robin Johnson is the Kentucky State Coordinator and has done a wonderful job keeping TSA strong in Kentucky. After attending last year's Regional, State and National events I can say the Kentucky TSA sponsors are a very dedicated group of individuals and was very impressed with the students at all the events. I would like for you to take some time and see how TSA can enhance your students' lives and education and become a member this year. The support to your curriculum along is worth the investment of time.

Robin has dates for various meetings and events with more to come. This and other information can be found on the KDE website in the Engineering & Technology Education section.

KY State TSA President: Ethan Russell

TSA, also known as Technology Student Association, is a state sponsored Career and Technical Student Organization (CTSO). TSA fosters the growth of individual students through competitive events that utilize Science, Technology, Engineering, and Mathematics (STEM). Through TSA students: learn, lead, teach, compete, grow, and as the model states *Learning to live in a technical world.*

TSA's Competitive events prepare students to live and prosper in their coming years after high school. As stated above, the competitive events utilize STEM, but that is not all that these events teach. TSA events like leadership strategies task a group of three students in one hour to solve a predetermined problem and dictate the steps that they would take to solve the problem. Leadership strategies make students not only become leaders but also learn to work together to solve a problem through teamwork. Chapter team requires that students run a meeting using Robert's Rules of Order, the same system used by businesses. This provides students the opportunity to learn how real corporations run business, better preparing students for the future. TSA events also test the ability of students to compete in engineering fields. 3-D CAD (Computer Aided Design) tests students' ability to use CAD to create a replica of a design, further strengthening what is learned in PLTW classes. With over 100 combined middle and high school events, TSA fosters academic growth.

The TSA regional, state, and national conferences provide unique opportunities not available with other organizations with its emphasis on professional attire and conduct. Students can gain leadership skills through local, state, and national offices. The conferences provide great opportunities for students to meet new people and compete in a friendly environment. TSA conferences are great places to make new friends from most of the 50 states and Germany. Meeting new people and exchanging culture provides a unique experience that is both fun and educational. TSA also allows students to travel throughout the United States with national conferences being held recently in Baltimore, Orlando, Denver, and Nashville.

TSA benefits the individual members as well as the school. Members of CTSO are more likely to graduate from high school and attend a college. Having an active TSA chapter in your school teaches students to excel and attempt to reach their full potential. Personally, through my experiences in TSA, I have learned to become more confident in myself, to take pride in my work, met new people, work with partners, and I have grown as a leader. I recommend TSA to any person and any school.

VERIZON Innovative APP Challenge $20,000

2013 Kentucky Winning Projects:

Lexington Traditional Magnet School:
1st Place Technology Bowl, Written
Southern Middle School:
5th Place Techno Talk
Central Hardin High School:
5th Place-Technology Bowl, Written
Madison Southern High School:
6th Place- Webmaster
Franklin County Career and Tech Center:
7th Place- Animatronics
Boyle County High School:
10th Place- Photographic Technology
Madison Southern High School:
10th Place- CAD 3D Engineering
Morgan County High School:
10th Place- Essays on Technology